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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,250	08/17/2001	Timothy T. Wenzel	1999U021D2.US	5104

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EXAMINER

PASTERCZYK, JAMES W

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 02/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/932,250

Applicant(s)

WENZEL ET AL.

Examiner

J. Pasterczyk

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2003 and 29 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 40-46, 48 and 49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 40-46, 48 and 49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/392584.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

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1. This Office action is in response to the amendments filed 10/11/03 and 12/29/03, the former not being entered due to non-compliance with the proper amendment format, the latter being entered and being substantively the same as the former, and refers to the Office action mailed 8/14/03.

2. Claims 40-46, 48 and 49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim.

In claim 40, it is still not clear that the first and second compounds do not react with each other above a given polymerization temperature of the polymerization catalyst and cocatalyst, or that above this temperature they form a compound which deactivates the catalyst/cocatalyst combination. Claim 45 also suffers this problem.

In claim 46, it is still not clear that makes another compound of the same "type" as a metallocene catalyst compound; it is suggested that "cyclopentadienyl group-containing" be inserted before "ligand" to clarify this.

3. Claims 40-46, 48 and 49 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the polymerization catalyst being a metallocene dihalide, the activator being an alumoxane, the first solid compound being L-malic acid, and the second solid compound being a carbonate, does not reasonably provide enablement for any of these reagents being anything else. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make or use the invention commensurate in scope with these claims.

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Contrary to applicants' assertion, the number of variables one of ordinary skill in the art would have to vary to obtain a functioning invention is quite sizable, including e.g. the identity of the first solid compound, the identity of the second, the amounts of each, the mole ratio of the two toward each other, the amounts and mole ratios of each of the two with regard to the amount of catalyst used, the amount and mole ratio of cocatalyst to use that will allow the polymerization to proceed at one temperature but not force the catalysis to proceed above a second, higher temperature, the identity of the product of the two solid compounds, at what temperature they react, at what temperature the catalyst is inactivated in the presence of how much of the first and second compounds, and others too numerous to mention. Even guided by the present disclosure, one of ordinary skill in the art would only be enabled to practice the present invention in only a very small section of the universe encompassed by the present claims. In addition, it is considered that not only are the catalyst arts unpredictable, but so are the chemical arts in general, hence there are at least two levels of uncertainty one of ordinary skill in the art must penetrate in order to produce a functional method of practicing this very broadly claimed invention. As applicants know, each application is examined separately on its own merits, hence the allowance or rejection of another case is not dispositive of the disposition of this case.

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 40-46, 48 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein as cited in and for the reasons of record in the previous Office action.

The present invention uses open "comprising" language to refer to the steps of the present invention, hence under the Klein reference the water used as one of the compounds making up

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the catalyst inhibitor above a certain temperature could be solid ice. In addition, most of the acids disclosed in Klein are either solids at room temperature or only slightly below, and although it is conventional to operate olefin polymerization reactors at temperatures above room temperature, this does not bar the preparation of the catalyst composition at a lower temperature. Applicants are also arguing a limitation not found in the claims, namely that the combination of the two compounds deactivates the catalyst plus cocatalyst above a given temperature.

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Pasterczyk whose telephone number is 571-272-1375. The examiner can normally be reached on M-F from 9 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached at 571-272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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2/5/04



Mark L. Bell
Supervisory Patent Examiner
Technology Center 1700